

Opener MPM 1D

Find the Pt of Intersection Between
 $y = -3x + 4$ and $3x - 2y = 16$

Apr 28-9:54 AM

Opener MPM 1D

Find the Pt of Intersection Between
 $y = -3x + 4$ and $y = \frac{3}{2}x - 8$

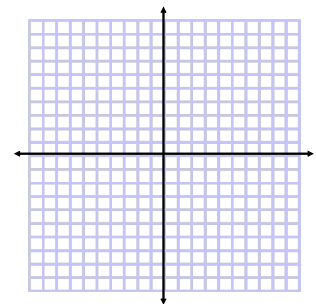
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$$\begin{aligned}
 2(-3x + 4) &= \left(\frac{3}{2}x - 8\right) \cdot 2 \\
 -6x + 8 &= 6x - 16 \\
 -6x + 8 &= 3x - 16 \\
 -6x + 8 &= 3x + 6x - 16 \\
 8 &= 9x - 16 \\
 8 + 16 &= 9x - 16 + 16 \\
 24 &= 9x \\
 \frac{24}{9} &= \frac{9x}{9} \\
 \left(\frac{8}{3}, -4\right)
 \end{aligned}$$

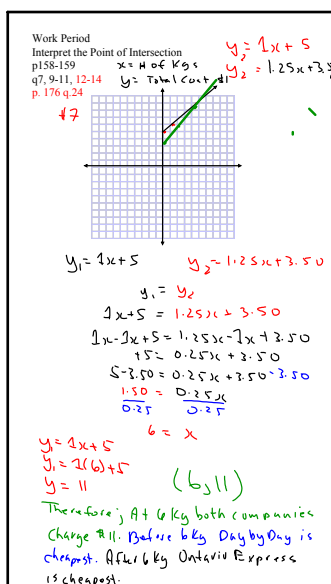
$x = \frac{24}{9}$
 $x = \frac{8}{3}$
 $y = -3x + 4$
 $y = -3\left(\frac{8}{3}\right) + 4$
 $y = \frac{24}{3} + 4$
 $y = -8 + 4$
 $y = -4$

Apr 28-2:13 PM

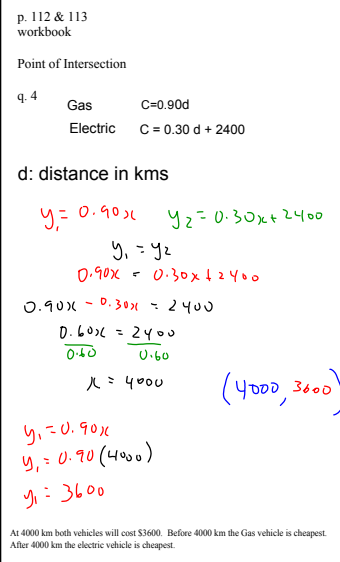
Work Period
 Interpret the Point of Intersection
 p158-159
 q7, 9-14



Apr 28-9:53 AM



Apr 28-9:53 AM



Apr 30-1:21 PM

$y = \text{cost}$
 $x = \text{# of pages}$

$$y_1 = 6x + 225$$

$$y_2 = 5.50x + 375$$

$$y_1 = y_2$$

$$6x + 225 = 5.50x + 375$$

$$6x - 5.50x + 225 = 375$$

$$0.50x + 225 = 375$$

$$0.50x = 375 - 225$$

$$0.50x = 150$$

$$\frac{0.50}{0.50} = \frac{150}{0.50}$$

$$x = 300$$

 $y_1 = 6x + 225$

$$y = 6(300) + 225$$

$$y = 1800 + 225$$

$$y = 2025$$

$$(300, 2025)$$

At 300 pages both printers cost \$2025. Before 300 pages Printer A is the cheapest.
 After 300 pages printer B is the cheapest.

Apr 30-1:38 PM

#6
 First Choice
 $y_1 = 0.40x + 2.50$

G.T.A. Taxi
 $y_2 = 0.25x + 3.25$

$x = \text{# of kilometers}$
 $y = \text{Cost in \$}$

$$y_1 = y_2$$

$$0.40x + 2.50 = 0.25x + 3.25$$

$$0.40x - 0.25x + 2.50 = 3.25$$

$$0.15x + 2.50 = 3.25$$

$$0.15x = 3.25 - 2.50$$

$$0.15x = 0.75$$

$$\frac{0.15}{0.15} = \frac{0.75}{0.15}$$

$$x = 5$$

 Sub $x = 5$

$$y = 0.25x + 3.25$$

$$y = 0.25(5) + 3.25$$

$$y = 1.25 + 3.25$$

$$y = 4.50$$

$$(5, 4.50)$$

At 5 kms both taxis will charge \$4.50. Before 5 kms First Choice is cheapest.
 After 5 kms, G.T.A. Taxi is cheapest.

Apr 30-1:52 PM

Find the point of intersection
 $y = 3x - 6$
 $5x + 3y = 12$
 $3y = -5x + 12$
 $y = -\frac{5}{3}x + 4$

$$y_1 = y_2$$

$$3(3x - 6) = \left(-\frac{5}{3}x + 4\right) \cdot 3$$

$$9x - 18 = -\frac{5}{3}x + 12$$

$$9x - 18 = -5x + 12$$

$$9x + 5x - 18 = 12$$

$$14x - 18 = 12$$

$$14x = 12 + 18$$

$$14x = 30$$

$$\frac{14}{14} = \frac{30}{14}$$

$$x = \frac{15}{7}$$

 $y = 3x - 6$

$$y = 3\left(\frac{15}{7}\right) - 6$$

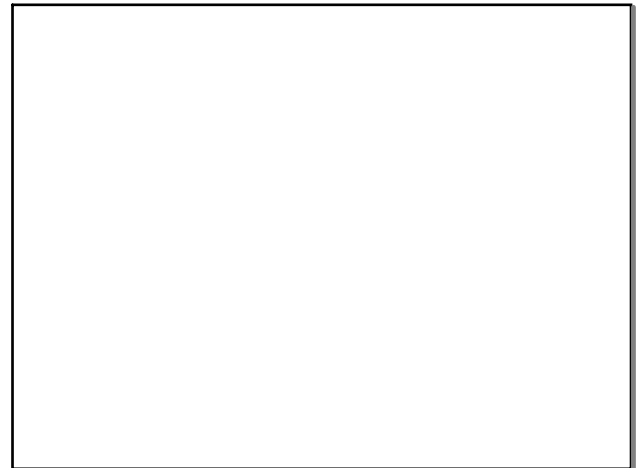
$$y = \frac{45}{7} - 6$$

$$y = \frac{45}{7} - \frac{42}{7}$$

$$y = \frac{3}{7}$$

Point
 $\left(\frac{15}{7}, \frac{3}{7}\right)$

Apr 30-2:02 PM



Nov 14-7:42 AM